

Welcome to the Fundamental Symmetry and Neutrinos Mini-Town Meeting

Organizers

David Hertzog

Alan Poon

Takeyasu Ito

Why are we here?

- Provide input, discussions, and prepare for the extended Town meeting tomorrow where the activities of the NSAC subcommittee chaired by Bob Tribble will be discussed
 - Update the community on where we are in the process
 - Collect input from the community
 - Alan Poon will present a summary from this meeting tomorrow
- Discussion on an organizational body for Fundamental Symmetry and Neutrinos

Process summary

May 15	NSAC Subcommittee meeting #1
June-July	Ad hoc working group formed
August 10-11	Working group meeting in Chicago
September 6-9	NSAC Subcommittee meeting #2 to hear presentations given by community members
October 25, 26	Town meetings at DNP meeting
Nov 29-Dec 2	NSAC Subcommittee meeting #3

General questions for operating facilities and on-going programs

- (1) What *major* scientific accomplishments and discoveries have occurred in your research area or at your facility since the 2007 LRP was drafted?
- (2a) What compelling and unique science can be carried out at the facility (or in the program) in the next five years assuming support similar to FY13 that includes cost of living increases?
- (2b) What additional impact would flat-flat funding to FY18 have on (2a)?
- (3) What is the minimum level of support (beam hours, upgrades, etc.) needed to maintain a viable program?
- (4) What workforce is needed to maintain a viable program?
- (5) What science would you expect to pursue at your facility (or in the program) in 2020 and beyond. What is needed to support this? What science would you expect to pursue without your facility?
- (6) What is role of the science in your research area in the international context? If the US effort in this area were seriously curtailed, to what degree would efforts in other countries fill the gap? And, to what degree would US scientists be able to advance research in this area by working outside of the country?
- (7) How does the facility (or program) contribute to the educational mission of training the future workforce in nuclear physics and associated applied areas?

Chicago Meeting, August 10-11, 2012

Speaker	Topic
D. Dean (ORNL)	Welcome and Charge
B. Filippone (Caltech)	What the NSAC subcommittee needs from YOU!
V. Cirigliano (LANL)	In Search of the New Standard Model
H. Robertson (U. Washington)	Neutrino mass, lepton number and the origin of matter
Z.-T. Lu (ANL)	EDM Searches
K. Heeger (Wisconsin)	Neutrino oscillations and interactions
W. Marciano (BNL)	Leptons and quark theory
D. Hertzog (U. Washington)	Leptons and quark experiment
B. Plaster (Kentucky)	Facilities
S. Elliott (LANL)	Zero-neutrino double beta decay status
B. Filippone (Caltech)	nEDM status
K. Paschke (UVA)	JLAB Parity Violation Experiment status

Talks are posted at: <http://www.phy.ornl.gov/funsym/>

Chicago Town Meeting, August 10-11, 2012

Contributed talks

Speaker	Topic
K. Lesko	DUSEL
A. Piepke	EXO
A. Young	UCN program at LANL
C. Y. Liu	Towards a 0.1 second measurement of the neutron lifetime in a magneto-gravitational trap
W. Louis	Neutrino oscillations and sterile neutrinos
Y. Kolomensky	CUORE
A. Poon	Majorana demonstrator
V. Gudkov	Symmetry violations in nuclei
K. Scholberg	Non-oscillation neutrino physics at the SNS

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NSAC Subcommittee meeting, September 6-9, 2012

Fundamental Symmetries and Neutrinos

13:30 – 14:15 – Fundamental Symmetries overview – M. Ramsey-Musolf

14:15 – 15:00 – Neutrinos overview – H. Robertson

15:00 – 15:20 – JLab Parity experiments – K. Paschke

15:20 – 15:40 – EDM overview – B. Filippone

15:40 – 16:10 – Other FS experiments – D. Hertzog

16:10 – 16:40 – $\beta\beta$ -decay overview – S. Freedman

16:40 – 17:15 – Neutrino experiments – K. Heeger

17:15 – 18:00 – Executive Session with questions to focus on FS&N

18:00 – 19:30 – Dinner Break

19:30 – 21:30 – Closed Executive Session

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Agenda

Chair: Alan Poon, *LBNL*

19:30 Welcome - Takeyasu Ito, *LANL*

19:40 Neutrino Physics Highlights - Hamish Robertson, *Washington*

20:10 Fundamental Symmetries Highlights - David Hertzog, *Washington*

20:40 The Chicago Meeting: Recommendations and White Paper
Status - Vince Cianciolo, *ORNL*

21:00 Community Discussion of Fundamental Symmetries and
Neutrino Priorities - moderated by Doug Beck, *UIUC*

21:30 Discussion of Possible Formal Community Advocacy Group -
moderated by Susan Seestrom, *LANL*